

RECEIVED

MAR 19 2003

TECH CENTER 1600/2900



ENTERED

1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003

TIME: 13:55:21

Input Set : A:\PTO.VSK.txt  
 Output Set: N:\CRF4\03132003\I810764A.raw

5 <110> APPLICANT: Ristic, Zoran  
 7       Bhadula, Shailendra  
 9       Yang, Genping  
 11      Elthon, Thomas  
 13      Habben, Jeffery  
 17 <120> TITLE OF INVENTION: Maize Chloroplast Protein Synthesis Elongation Factors and  
 Methods of Use  
 18      for Same  
 22 <130> FILE REFERENCE: P03965US1  
 26 <140> CURRENT APPLICATION NUMBER: 09/810,764A  
 28 <141> CURRENT FILING DATE: 2001-03-16  
 32 <150> PRIOR APPLICATION NUMBER: 60/190,175  
 34 <151> PRIOR FILING DATE: 2000-03-17  
 38 <150> PRIOR APPLICATION NUMBER: 60/203,204  
 40 <151> PRIOR FILING DATE: 2000-05-11  
 44 <160> NUMBER OF SEQ ID NOS: 6  
 48 <170> SOFTWARE: PatentIn version 3.1  
 52 <210> SEQ ID NO: 1  
 54 <211> LENGTH: 20  
 56 <212> TYPE: PRT  
 58 <213> ORGANISM: Zea mays  
 62 <220> FEATURE:  
 64 <221> NAME/KEY: MISC\_FEATURE  
 66 <222> LOCATION: (2)..(2)  
 68 <223> OTHER INFORMATION: X is any amino acid  
 72 <220> FEATURE:  
 74 <221> NAME/KEY: MISC\_FEATURE  
 76 <222> LOCATION: (16)..(16)  
 78 <223> OTHER INFORMATION: X is any amino acid  
 82 <400> SEQUENCE: 1  
 W--> 84 Ala Xaa Asn Lys Phe Glu Arg Leu Lys Pro His Val Asn Ile Gly Xaa  
 85 1                   5                   10                   15  
 88 Ile Gly His Val  
 89                   20  
 92 <210> SEQ ID NO: 2  
 94 <211> LENGTH: 20  
 96 <212> TYPE: PRT  
 98 <213> ORGANISM: Zea mays  
 102 <400> SEQUENCE: 2  
 104 Ala Val Lys Val Thr Ile Asn Gly Phe Glu Arg Ile Gly Thr Asn Phe  
 105 1                   5                   10                   15  
 108 Leu Thr Glu Ala  
 109                   20  
 112 <210> SEQ ID NO: 3

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003  
TIME: 13:55:21

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF4\03132003\I810764A.raw

114 <211> LENGTH: 12  
 116 <212> TYPE: PRT  
 118 <213> ORGANISM: Zea mays  
 122 <220> FEATURE:  
 124 <221> NAME/KEY: MISC\_FEATURE  
 126 <222> LOCATION: (9)..(9)  
 128 <223> OTHER INFORMATION: X is any amino acid  
 132 <400> SEQUENCE: 3  
**w--> 134 Val Val Ala Trp Tyr Asp Asn Glu Xaa Gly Tyr Ser**  
 135 1 5 10  
 138 <210> SEQ ID NO: 4  
 140 <211> LENGTH: 20  
 142 <212> TYPE: PRT  
 144 <213> ORGANISM: Zea mays  
 148 <220> FEATURE:  
 150 <221> NAME/KEY: MISC\_FEATURE  
 152 <222> LOCATION: (18)..(18)  
 154 <223> OTHER INFORMATION: X is any amino acid  
 158 <400> SEQUENCE: 4  
 160 Ala Arg Gly Lys Phe Glu Arg Thr Lys Pro His Val Asn Ile Gly Thr  
 161 1 5 10 15  
**w--> 164 Ile Xaa His Val**  
 165 20  
 168 <210> SEQ ID NO: 5  
 170 <211> LENGTH: 19  
 172 <212> TYPE: PRT  
 174 <213> ORGANISM: Zea mays  
 178 <220> FEATURE:  
 180 <221> NAME/KEY: MISC\_FEATURE  
 182 <222> LOCATION: (17)..(17)  
 184 <223> OTHER INFORMATION: X can be any amino acid  
 188 <220> FEATURE:  
 190 <221> NAME/KEY: MISC\_FEATURE  
 192 <222> LOCATION: (18)..(18)  
 194 <223> OTHER INFORMATION: X can be any amino acid  
 198 <400> SEQUENCE: 5  
 200 Arg Gly Lys Phe Glu Arg Thr Lys Pro Gly Val Asn Ile Gly Thr Ile  
 201 1 5 10 15  
**w--> 204 Xaa Xaa Val**  
 208 <210> SEQ ID NO: 6  
 210 <211> LENGTH: 1681  
 212 <212> TYPE: DNA  
 214 <213> ORGANISM: Zea mays  
 218 <400> SEQUENCE: 6  
 219 attcccaaat aatccccacc tccccgtgct gctccggccgc ccgccatggc ctccctcacc 60  
 221 tcggcgcca cttcaactcct cttcccccgag gcctcctcat ccaggagccg catccgtctc 120  
 223 tccacccccc tgggcttctc cgccgcagcc gcgcggctgc ggagccaggg ggcggcagtg 180  
 225 ggcgcgcggc ggcgcggcg cctgctggtg gtgcgcgcgg cgagggcaa gttcgagcgc 240  
 227 accaaaccac acgtcaacat aggcaccatc ggccatgtcg accacgaaa gaccactctc 300

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/09/810,764A**

**DATE: 03/13/2003**  
**TIME: 13:55:21**

**Input Set : A:\PTO.VSK.txt**  
**Output Set: N:\CRF4\03132003\I810764A.raw**

229 accgccgcgc tcaccatggc	gctcgccccc	gtcggtggca	gccccccctaa	gaagtacgac	360
231 gagatcgacg ccgcggccgc	ggagcgccgc	cgcgttatca	ccatcaacac	cgcaccgtc	420
233 gaggatcgaga ccgagacccg	ccactacgca	cacgtcgact	gccccggcca	cggcactat	480
235 gtcaagaata tgatcacccg	cgctgcgacg	atggacggtg	ccatcctcg	cgtatccgg	540
237 gcccacgggc ccatgccca	gaccggaaag	cacatcctcc	tcgccaagca	agtcgggtt	600
239 cccaaatcg ttgttttcc	caacaagaag	gacatggtcg	acgacggag	gctgctcgag	660
241 ctcgtcgagc tcgagggtcc	cgagctgctc	agcaactacg	agtacgacgg	cgacgacgta	720
243 ccaatcgctg ctggctccgc	cctcaaggcg	ctcgaggctc	tcatggtcaa	ccctgccttg	780
245 aagcgccgc acgatgatg	ggtcgactac	atcttcgt	tggttgataa	agtggattcc	840
247 tatattccag tcccgagag	gcagactgac	ctcccggtt	tgctcgctgt	tgaagatgtc	900
249 ttctccatca ccggctgtgg	tacagttgcc	actggccgt	tagacgtgg	caccgtcaag	960
251 attgggtaca cagtcgat	cgatcgatc	cgggacaccc	ggaactgcac	ggtcactgg	1020
253 gttgagatgt tccagaagac	catggatgt	gccatggccg	gagacaatgt	tggctgtcg	1080
255 ctccgtggta tgcaaggg	tgacattgaa	agaggcatgg	tgctggccaa	gcctggctct	1140
257 atcacaccgc acaccaagtt	tgaggctgtt	gtgtatgtgc	ttaagaagga	agagggtggc	1200
259 cgacactcac ctttctcc	tggttaccgc	ccacagttct	acatgcggac	aactgatgt	1260
261 acagggatgt tgactacgt	tatgaatgac	aaggatgagg	aggcgaagat	gtgcacgtcc	1320
263 ggtgaccgt	tcaaaaatgt	tggtcagctc	atccagcctg	ttgttgcgt	1380
265 aggtttgc	tccgtgaggg	tggtaagacc	gttgggtccg	gtgtcatcaa	1440
267 gatataacat	atccaccatg	agaattttcc	ttgtttactc	aaagcgacat	1500
269 gctccgttagt	tgtttattatg	tggtgatgtt	taggggtgc	tcatgtcaca	1560
271 acactttttt	tttgtcaagt	gaatttgc	aatttatgac	attcacgaca	1620
273 tatctggtt	caactcattt	ggctaagagg	tgccatctac	tgttaaaaaaa	1680
275 a					1681

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003  
TIME: 13:55:22

Input Set : A:\PTO.VSK.txt  
Output Set: N:\CRF4\03132003\I810764A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,16

Seq#:3; Xaa Pos. 9

Seq#:4; Xaa Pos. 18

Seq#:5; Xaa Pos. 17,18

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 17

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/810,764A

DATE: 03/13/2003

TIME: 13:55:22

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03132003\I810764A.raw

L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16  
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16